



LONG TERM PAVEMENT PERFORMANCE
PROGRAM DIRECTIVE



For the Technical Direction of the LTPP Program

Program Area: IMS **Directive Number:** I-44
Date: July 7, 1997 **Supersedes:** n/a
Subject: 3rd Quarter 1997 IMS and CTDB Uploads

There are two IMS uploads expected between July 1 and September 30, 1997, August 1st and September 2nd.

The August 1st upload will consist of two parts, a regional submission for routine modules and an extraction done by SAIC that will be specific to each region. The following modules will be submitted by the regions:

-- SMP - all sections, complete replacement of all tables with QC through level E. Browser does not provide for manual upgrades of these tables and none are expected. As a point of information a list of expected problems is attached. This list comes from a memo prepared by PCS/Law after a review of SMP instrumentation data in the last SMP upload.

AWS - all sections, initial loading of all tables with QC through Level E. Browser does not provide for manual upgrades of these tables and none are expected.

-- FWD - All sections, a complete replacement of all tables with complete QC. Modifications to FWD QC have been made in addition to the table restructuring. QC modifications address both sensor out-of-range data issues and existence of temperature data brought forward at the IMS meeting. Browser has been modified to reflect changes in table names and structures and permit manual upgrades.

-- Profile - All sections processed with Proqual 2.04 or earlier will be provided for complete replacement of the tables. Sections which must be processed or reprocessed with Proqual 2.06 (or later) will be scheduled for the December 15, 1997 upload. QC, including any appropriate manual upgrades will be completed through Level E.

Materials Testing - All sections, all tables with focus on data from the FHWA labs. The data for the AC01 tables is of particular interest. QC can be run, should be. No manual upgrades are required.

SPS 3 and 4 - All sections, all tables with QC run if necessary and no manual upgrades required.

The SAIC extraction will begin August 2 to update tables known to be flawed in some fashion. QC will be run completely if available. A tentative list is -

- SPS_GPS_Link

- SPS_ID

- SPS_General

- INV_ID (all regions to acquire updated global positioning system information)

- SPS7_? (Southern and North Central)

- SPS9_* (Southern)

The final list of tables by regions will be provided July 17th. SPRs received after July 25th on items effecting the August 1st and 2nd uploads may not be resolved prior to the deadlines.

The September 2nd upload will be an extraction by PCS/Law of the Materials Testing tables, in particular those loaded with the results of the P46 testing protocol. The QC is expected to be complete by COB of September 2nd and SAIC will begin the extractions across the network on September 3d.

The upload to the CTDB is expected to be as follows after the June 30th submission of the remaining 1994 and 1995 data including SPS core sections.

August 1st for SPS linked sections for the years 1990-1995 (those requiring SPS.DAT for processing). SPS.dat processing instructions are expected to be available after July 7th. A copy of the SPS.DAT file used will be included in the submission.

September 30th for all 1996 data including SPS linked sections and updates of files from 1990-1995 uploads which failed to load into the IMS. A copy of the SPS.DAT (and GPS.DAT parallel file created at the regions for GPS sections) file will be included with the submission.

Expected SMP Deficiencies

SMP_LAYOUT_INFO

- For site 561006, the station locations of the instrumentation hole and piezometer were input as -15 and 100, respectively. These locations were specified in feet, whereas the program requires that stations be expressed in meters. These quantities need to be soft-converted to meters and re-entered.
- For site 161010, the depth to bottom of metal thermistor probe (0.34 m) is greater than the depth to top of PVC thermistor unit (0.331 m). According to the installation report, the depth to bottom of metal thermistor probe should be 0.254 m, not 0.34 m.

SMP_TDR_DEPTHS_LENGTH

- For site 561007, the depth for TDR probe 1 is 0.152 m, while the depth to the thermistor PVC top is 0.164 m. According to the installation report, the depth to the thermistor top should be 0.146 m.

SMP_DRY_DENSITY

- Site 204054 will fail since the dry density date is 05/08/96 and the installation date is 08/24/95 which is a difference greater than the one day allowable.

SMP_ELEV_AV_DATA

- Site 281802 has an elevation survey performed on 07/19/94 which is one day prior to the installation date of 07/20/94. The survey should be on the installation date or one day after.
- Site 404165 has an elevation survey performed on 03/30/94 with an installation date of 04/29/94. The survey should be on the installation date or one day after.

SMP_ELEV_AC_OFFSET

- Site 561007 failed the check that $OFFSET_PE (0.18) < OFFSET(0.18) < OFFSET_ML (0.16) < OFFSET_IWP (0.16) < OFFSET_ILE (0.14)$.
- Site 308129 has a blank offset record on 08/12/92 with no associated elevation survey data.
- Site 561007 has a blank offset record on 05/17/95 with no associated elevation survey data.
- Site 469187 has no reference elevation data for 10/24/94.
- Site 561007 has no reference elevation data for 08/19/94.

Expected SMP Deficiencies

- Site 906405 has no reference elevation data for 10/20/94.

SMP_ERESIST_MAN_4POINT

- For site 308129 there are two sets of data collected on 03/12/92, however, the installation date is 08/12/92.

SMP_JOINT_FAULT_DATA

- Site 313018 has joint fault data but no elevation survey data.

SMP_JOINT_FAULT_OFFSET

- Site 533813 has a blank record on 08/28/96 with only the key fields entered. Additionally there is not associated joint fault measurement data for that day in SMP_JOINT_FAULT_DATA.

SMP_JOINT_GAGE_OFFSET

- Site 833802 has a Construction_No = 0.

SMP_MRCTEMP_MAN

- Site 308129 has data in this table for the period form 03/12/92 to 05/12/93 and an installation date of 08/12/92.

SMP_WATERTAB_DEPTH_MAN

- Site 131031 has a measurement on 05/22/95 prior to the installation date of 08/02/95.
- Site 404165 has a measurement on 03/30/94 prior to the installation date of 04/29/94.
- Site 484143 has a measurement on 01/18/93 prior to the installation date of 11/17/93.
- Site 510113 has a measurement on 01/24/95 prior to the installation date of 10/23/95.

SMP_ERESIST_AUTO

- Site 276251 has no automated resistivity measurement data in this table although SMP_LAYOUT_INFO indicates that resistivity probes are installed.
- Site 4810771 has no automated resistivity measurement data in this table although SMP_LAYOUT_INFO indicates that resistivity probes are installed.

Expected SMP Deficiencies

- Site 571007 has no automated resistivity measurement data in this table although SMP_LAYOUT_INFO indicates that resistivity probes are installed.
- Site 906405 has no automated resistivity measurement data in this table although SMP_LAYOUT_INFO indicates that resistivity probes are installed.

SMP_TDR_AUTO

- Site 404165 failed a check on this table due to a wrong installation date.
- Site 276251 has no data in this table.
- Site 561007 has no data in this table.
- Site 063042 has two sets of data collected on 05/17/96 showing that the distance between TDR wavepoints is 0.02 m. All other data show the wavepoint distance value to be 0.01 m. There is no QC on wavepoint distance.

SMP_ATEMP_RAIN_DAY

- Site 404165 has an installation date in SMP_LAYOUT_INFO of 04/29/94, which should probably be 03/29/94 and remove flags from a month's worth of data.

SMP_MRCTEMP_AUTO_DAY_STATS

- Site 404165 has an installation date in SMP_LAYOUT_INFO of 04/29/94, which should probably be 03/29/94 and remove flags from a month's worth of data.

Prepared by: Barbara K. Ostrom Approved by:

Monte Symons
Team Leader, LTPP Operations